



L	Hits	Search Text	DB	Time stamp
Number	nics			
1	140	((RU OR RUTHENIUM or pt or ir or os or rh or iridium or platinum or osmium or rhodium) same electromigration)	USPAT; US-PGPUB	2002/03/11 12:39
2	136	(((RU OR RUTHENIUM or pt or ir or os or rh or iridium or platinum or osmium or rhodium) and electromigration)) and	EPO; JPO; DERWENT; IBM_TDB	2002/03/11 12:53
3	138	(copper or cu) ((RU OR RUTHENIUM) and (DIFFUSION ADJ BARRIER))	EPO; JPO; DERWENT;	2002/03/11 13:33
4	27	((RUTHENIUM or iridium or platinum or osmium or rhodium) and electromigration)	IBM_TDB EPO; JPO; DERWENT;	2002/03/11 14:07
-	28	((257/751.CCLS.) AND (RU OR RUTHENIUM))	IBM_TDB	2001/06/27
_	0	(((257/751.CCLS.) AND (RU OR RUTHENIUM))) and ((copper or cu) adj intercon\$10)		2000/07/05
_	17	((((257/751.CCLS.) AND (RU OR RUTHENIUM))) AND (CU OR COPPER))		2000/07/05 17:11
-	27	((RU OR RUTHENIUM) WITH (DIFFUSION ADJ BARRIER))		2001/06/25
-	0	(((RU OR RUTHENIUM) WITH (DIFFUSION ADJ BARRIER))) and ((copper or cu) adj		2000/07/05 17:15
-	o _.	intercon\$10) (((RU OR RUTHENIUM) WITH (DIFFUSION ADJ BARRIER))) and ((copper or cu) with		2000/07/05 17:16
_	8	intercon\$10) ((((RU OR RUTHENIUM) WITH (DIFFUSION ADJ		2000/07/05 17:16
_	3592	BARRIER))) AND (CU OR COPPER)) ((CU OR COPPER) WITH INTERCON\$10)		2000/12/06 15:33
-	272	((((CU OR COPPER) WITH INTERCON\$10)) AND (DIFFUSION ADJ BARRIER))		2001/06/26
_	210	(((((CU OR COPPER) WITH INTERCON\$10)) AND (DIFFUSION ADJ BARRIER))) AND (PLUG OR VIA))		2000/07/06 11:05
-	531	((pt OR platinum) WITH INTERCON\$10)	USPAT	2000/12/06 16:01
-	17	(((pt OR platinum) WITH INTERCON\$10)) same (diffusion adj barrier)	USPAT	2000/12/06 15:37
_	18	(((pt OR platinum) WITH INTERCON\$10)) same (diffusion adj barrier)	USPAT	2001/06/26 13:23
-	12	((pt OR platinum) adj INTERCON\$10)	USPAT	2000/12/06 16:02
-	12	((pt OR platinum) adj INTERCON\$10)	USPAT	2000/12/06
_	1	1998jp-0039992.ap,prai.	USPAT; US-PGPUB; EPO; JPO;	2001/06/25 16:14
-	2	jp-11317455-\$.did.	DERWENT USPAT; US-PGPUB; EPO; JPO;	2001/06/25 16:27
-	2	jp-10229084-\$.did.	DERWENT USPAT; US-PGPUB;	2001/06/25 16:36
-	1	1997jp-0030432.ap,prai.	EPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO;	2001/06/25 16:37
_	47	((RU OR RUTHENIUM) WITH (DIFFUSION ADJ	DERWENT USPAT;	2001/11/23
_	2	BARRIER)) ((RU OR RUTHENIUM) WITH electromigration)	US-PGPUB USPAT;	10:19 2001/11/23
_	21	(primary adj constituent) with defin\$6	US-PGPUB USPAT; US-PGPUB	10:31 2001/06/26 12:30





465 (((CU OR COPPER) WITH INTERCONSIO) AND (DIFFUSION ADD BARRIER)) 10:32 10:3	•				
26 (((()) to R) platinum) WITH (INTERCONSIO) SAME (diffusion ad) barrier) (() US-ROFUS 11:20	-	465			1
Same (diffusion adj barrier)	_	26			
Or iridium or platinum or osmium or rodulum) same electromigration) 13		20			l .
A	-	111			
CIRU OR RUTHENIUM or pt or ir or os or rhodium) and electromigration DRRMENT; 130 127 ((RU OR RUTHENIUM or pt or ir or os or rhodium) and electromigration) DRRMENT; 130 111 (RU OR RUTHENIUM) with (DIFFUSION ADJ BRARIER) DRRMENT; DR				US-PGPUB	11:23
17:30 17:3	_	413		EPO: JPO:	2001/06/26
127		110			1
th or iridium or platinum or osmium or chodium) and electromigration) and (copper or cu) 11 ((RU OR RUTHENIUM) WITH (DIFFUSION ADJ BARRIER)) 120 ((RU OR RUTHENIUM) and (DIFFUSION ADJ BARRIER)) 13:28					
Prodium and electromigration and Copper or Cu ((RU OR RUTHENIUM) WITH (DIFFUSION ADJ EPO; JPO; JPO; DERWENT; IBM TDB EPO; JPO; DERWENT;	_	12/			1
Cooper or Cul BARRIER)					11.27
BARRIER			(copper or cu)	_	
120	_	11			
CRU OR RUTHENIUM) and (DIFFUSION ADJ BARRIER) CRUTHENIUM Or iridium or platinum or comium or rhodium) and electromigration DERWENT; IBM TDB EPG7, JPG7, 2001/11/23 DERWENT; IBM TDB USPAT; USP			BARRIER))		13:20
25	_	120	((RU OR RUTHENIUM) and (DIFFUSION ADJ	_	2001/11/23
25			BARRIER))		11:33
Osmium or rhodium) and electromigration DERWENT, IBM TDB	1_	25	//DITUTUTION or iridium or platinum or		2001/11/23
STOPPUB STOP		25			
Section Sect				IBM_TDB	
- 224 257/767.ccls. USPAT, US-PGPUB USPAT, 2001/06/27 USPAT, US-PGPUB USPAT, 2001/06/27 USPAT, 2001/11/23 USPAT, 2001/11	_	377	257/762.ccls.	· ·	
07.47 07.47 07.47 07.47 07.47 07.47 07.47 07.48 07.47 07.47 07.47 07.47 07.47 07.47 07.47 07.48 07.47 07.48 07.49 07.48 07.49 07.48 07.48 07.48 07.48 07.48 07.48 07.48 07.48 07.48 07.48 07.48 07.48 07.48 07.48 07.4	_	224	257/767.ccls.		
US-PGPUB				· ·	07:47
- 574 257/751.ccls. USPAT; US-PGPUB USPAT; USP	-	242	257/768.ccls.		
S-PGPUB O7:48 US-PGPUB O7:48 US-PGPUB O7:48 US-PGPUB O7:48 US-PGPUB O7:48 US-PGPUB O7:48 US-PGPUB US-PGPUB O7:49 US-PGPUB US-PGPUB O7:49 US-PGPUB USPAT; US-PGPUB O7:49 USPAT; US-PGPUB USPAT; US-PGPUB; PEPO; JPO; DERWENT USPAT; US-PGPUB; USPAT; US-PGPUB; USPAT; US-PGPUB	_	574	257/751 ccls	!	· ·
Section Sect		3/4	2577751.0015.		
- 496 438/653.ccls. - 1834 257/762.ccls. 257/767.ccls. 257/768.ccls. USPAT; US	-	302	438/627.ccls.		
1834 257/762.ccls. 257/767.ccls. 257/768.ccls. US-PGPUB 257/751.ccls. 438/627.ccls. 438/653.ccls. US-PGPUB 10:18 257/751.ccls. 438/627.ccls. 438/653.ccls. US-PGPUB 2001/11/23 US-PGPUB US-		406			
- 1834 257/762.ccls. 257/767.ccls. 257/768.ccls. USPAT; 2001/11/23 10:18	-	496	438/653.CCIS.		
TWASAKI-TOMIO and MIURA-HIDEO	_	1834		1	
US-PGPUB; EPO; JPO; DERWENT USPAT; US-PGPUB (PFO); JPO; DERWENT USPAT; US-PGPUB; EPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO; DERWENT USPAT; US-PGPUB US-PGPUB USPAT; US-	1			1	
1 1999jp-0036824.ap,prai. EPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO; DERWENT US-PGPUB USPAT; US-PGP	-	11	IWASAKI-TOMIO and MIURA-HIDEO	l ' '	
1 1999jp-0036824.ap,prai.					
2014 257/762.ccls. 257/767.ccls. 257/768.ccls. DERWENT DERWENT 257/751.ccls. 438/627.ccls. 438/653.ccls. US-PGPUB 10:18 US-PGPUB US-PGPU					2001 /11 /22
2014 257/762.ccls. 257/767.ccls. 257/768.ccls. USPAT; USPA	-	1	1999jp-0036824.ap,pra1.	l ' I	
- 2014 257/762.ccls. 257/767.ccls. 257/768.ccls. USPAT; 2001/11/23 USPAT; 257/751.ccls. 438/627.ccls. 438/653.ccls. USPAT; 2002/03/11 USPA	1			l '	
257/751.ccls. 438/627.ccls. 438/653.ccls. US-PGPUB (10:18 (1RU OR RUTHENIUM) WITH (DIFFUSION ADJ BARRIER)) 2 ((RU OR RUTHENIUM) WITH electromigration) US-PGPUB 09:18 (1RU OR RUTHENIUM) WITH electromigration) US-PGPUB 09:36 (1RU OR COPPER) WITH INTERCON\$10)) AND (1RT STORT ST		_		1	2001/11/22
- 61 ((RU OR RUTHENIUM) WITH (DIFFUSION ADJ BARRIER)) - 2 ((RU OR RUTHENIUM) WITH electromigration) - 596 (((((CU OR COPPER) WITH INTERCON\$10)) AND (DIFFUSION ADJ BARRIER)) - 33 (((pt OR platinum) with intercon\$10)) same (diffusion adj barrier) - ((RU OR RUTHENIUM or pt or ir or os or rh or iridium or platinum or osmium or rhodium) same electromigration) - 134 ((RU OR RUTHENIUM or pt or ir or os or rhodium) and electromigration) - 128 ((RU OR RUTHENIUM) and (DIFFUSION ADJ BARRIER)) - 26 ((RUTHENIUM or iridium or platinum or osmium or osmium or rhodium) and electromigration) - 26 ((RUTHENIUM or iridium or platinum or osmium or osmium or osmium or osmium or osmium or osmium or rhodium) and electromigration) - 27 ((RU OR RUTHENIUM) with (DIFFUSION ADJ DERWENT; IBM TDB EPO; JPO; JPO; JPO; JPO; JPO; JPO; JPO; J	-	2014		1	
BARRIER)	_	61			
Second Compact Compa			BARRIER))	US-PGPUB	
- 596 ((((CU OR COPPER) WITH INTERCON\$10)) AND (DIFFUSION ADJ BARRIER)) - 33 (((pt OR platinum) WITH INTERCON\$10)) same (diffusion adj barrier) - 125 ((RU OR RUTHENIUM or pt or ir or os or rh or iridium or platinum or osmium or rhodium) same electromigration) - 134 ((RU OR RUTHENIUM or pt or ir or os or rh or iridium or platinum or osmium or rhodium) and electromigration)) and (copper or cu) - 128 ((RU OR RUTHENIUM) and (DIFFUSION ADJ BARRIER)) - 26 ((RUTHENIUM or iridium or platinum or osmium or osmium or rhodium) and electromigration) - 26 ((RUTHENIUM or iridium or platinum or osmium or osmium or rhodium) and electromigration) - 27 ((RU OR RUTHENIUM) WITH (DIFFUSION ADJ USPAT; 2002/03/11	-	2	((RU OR RUTHENIUM) WITH electromigration)		
(DIFFUSION ADJ BARRIER)) ((pt OR platinum) WITH INTERCON\$10)) same (diffusion adj barrier) ((RU OR RUTHENIUM or pt or ir or os or rh or iridium or platinum or osmium or rhodium) same electromigration) ((RU OR RUTHENIUM or pt or ir or os or rh or iridium or platinum or osmium or rhodium) and electromigration)) and ((copper or cu) ((RU OR RUTHENIUM) and (DIFFUSION ADJ BARRIER)) ((RU OR RUTHENIUM) and electromigration) ((RUTHENIUM or iridium or platinum or osmium or osmium or rhodium) and electromigration) ((RU OR RUTHENIUM) WITH (DIFFUSION ADJ USPAT; 2002/03/11	_	596	((((CU OR COPPER) WITH INTERCON\$10)) AND		
same (diffusion adj barrier) (RU OR RUTHENIUM or pt or ir or os or rh or iridium or platinum or osmium or rhodium) same electromigration) ((RU OR RUTHENIUM or pt or ir or os or rh or iridium or platinum or osmium or rhodium) and electromigration)) and (copper or cu) ((RU OR RUTHENIUM) and (DIFFUSION ADJ EARRIER)) 26 ((RUTHENIUM or iridium or platinum or osmium or osmium or rhodium) and electromigration) 27 ((RU OR RUTHENIUM) WITH (DIFFUSION ADJ USPAT; 28 (RUTHENIUM or iridium or platinum or osmium or osmium or rhodium) and electromigration) 29 ((RU OR RUTHENIUM) WITH (DIFFUSION ADJ USPAT; 2002/03/11 11:08 2002/03/11 2002/03/11 2002/03/11 2002/03/11			(DIFFUSION ADJ BARRIER))	US-PGPUB	
- 125 ((RU OR RUTHENIUM or pt or ir or os or rh or iridium or platinum or osmium or rhodium) same electromigration) - 134 ((RU OR RUTHENIUM or pt or ir or os or rhodium) same electromigration) - 134 ((RU OR RUTHENIUM or pt or ir or os or rhodium) and electromigration)) and - 128 ((RU OR RUTHENIUM) and (DIFFUSION ADJ EPO; JPO; DERWENT; 13:32 - 128 ((RUTHENIUM or iridium or platinum or osmium or rhodium) and electromigration) - 128 ((RUTHENIUM or iridium or platinum or osmium or rhodium) and electromigration) - 129 ((RU OR RUTHENIUM) WITH (DIFFUSION ADJ USPAT; 2002/03/11)	-	33			
or iridium or platinum or osmium or rhodium) same electromigration) 134 (((RU OR RUTHENIUM or pt or ir or os or rh or iridium or platinum or osmium or rhodium) and electromigration)) and (copper or cu) 128 ((RU OR RUTHENIUM) and (DIFFUSION ADJ EPO; JPO; DERWENT; 13:32 128 ((RUTHENIUM or iridium or platinum or osmium or rhodium) and electromigration) 26 ((RUTHENIUM or iridium or platinum or osmium or rhodium) and electromigration) 272 ((RU OR RUTHENIUM) WITH (DIFFUSION ADJ USPAT; 2002/03/11	_	125	same (diffusion adj parrier) ((RU OR RUTHENIUM or pt or ir or os or rh		
rhodium) same electromigration) (((RU OR RUTHENIUM or pt or ir or os or rh or iridium or platinum or osmium or rhodium) and electromigration)) and (copper or cu) ((RU OR RUTHENIUM) and (DIFFUSION ADJ BARRIER)) 26 ((RUTHENIUM or iridium or platinum or osmium or rhodium) and electromigration) 27 ((RU OR RUTHENIUM) WITH (DIFFUSION ADJ USPAT; 28 ((RUTHENIUM or iridium or platinum or osmium or rhodium) and electromigration) 29 ((RU OR RUTHENIUM) WITH (DIFFUSION ADJ USPAT; 2002/03/11 2002/03/11		123	or iridium or platinum or osmium or	•	
rh or iridium or platinum or osmium or rhodium) and electromigration)) and (copper or cu) 128 ((RU OR RUTHENIUM) and (DIFFUSION ADJ BARRIER)) 26 ((RUTHENIUM or iridium or platinum or osmium or rhodium) and electromigration) 27 ((RU OR RUTHENIUM) WITH (DIFFUSION ADJ USPAT; 2002/03/11			rhodium) same electromigration)	EDO: TDO:	2002/02/11
rhodium) and electromigration)) and [IBM_TDB] (copper or cu) ((RU OR RUTHENIUM) and (DIFFUSION ADJ EPO; JPO; DERWENT; I3:32 END TDB (RUTHENIUM or iridium or platinum or osmium or rhodium) and electromigration) (RUTHENIUM or iridium or platinum or osmium or rhodium) and electromigration) (RUTHENIUM or Iridium or platinum or osmium or rhodium) and electromigration) (RUTHENIUM) WITH (DIFFUSION ADJ USPAT; 2002/03/11	-	134	(((RU OR RUTHENIUM or pt or ir or os or		
(copper or cu) (RU OR RUTHENIUM) and (DIFFUSION ADJ EPO; JPO; 2002/03/11 DERWENT; 13:32 CRUTHENIUM or iridium or platinum or osmium or rhodium) and electromigration) CRUTHENIUM or iridium or platinum or osmium or rhodium) and electromigration) CRUTHENIUM OR RUTHENIUM) WITH (DIFFUSION ADJ USPAT; 2002/03/11			rhodium) and electromigration)) and		
BARRIER)) DERWENT; 13:32 ((RUTHENIUM or iridium or platinum or osmium or rhodium) and electromigration) ((RU OR RUTHENIUM) WITH (DIFFUSION ADJ USPAT; 2002/03/11			(copper or cu)	- TDO: TDO:	2002/02/11
- 26 ((RUTHENIUM or iridium or platinum or osmium or rhodium) and electromigration) - 72 ((RU OR RUTHENIUM) WITH (DIFFUSION ADJ USPAT; 2002/03/11	-	128	1 ' '		
osmium or rhodium) and electromigration) DERWENT; 14:07 IBM_TDB USPAT; 2002/03/11			DANKIEKI	IBM_TDB	
- 72 ((RU OR RUTHENIUM) WITH (DIFFUSION ADJ USPAT; 2002/03/11	-	26	((RUTHENIUM or iridium or platinum or		
- 72 ((RU OR RUTHENIUM) WITH (DIFFUSION ADJ USPĀT; 2002/03/11			osmium or rhodium) and electromigration)	· ·	14:0/
	_	72	((RU OR RUTHENIUM) WITH (DIFFUSION ADJ		
				US-PGPUB	09:19





_	2	((RU OR RUTHENIUM) WITH electromigration)	USPAT;	2002/03/11
			US-PGPUB	09:36
-	709	((((CU OR COPPER) WITH INTERCON\$10)) AND	USPAT;	2002/03/11
		(DIFFUSION ADJ BARRIER))	US-PGPUB	09:39
_	35	(((pt OR platinum) WITH INTERCON\$10))	USPAT;	2002/03/11
		same (diffusion adj barrier)	US-PGPUB	11:09